



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.												
10/036,566	12/21/2001	Eric J. Horvitz	MS177851.1	4018												
7590 Himanshu S. Amin Amin & Turocy, LLP 24th Floor 1900 E. 9th Street Cleveland, OH 44114		11/28/2007	<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">BOUTAH, ALINA A</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2143</td><td></td></tr><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>11/28/2007</td><td>PAPER</td></tr></table>		EXAMINER		BOUTAH, ALINA A		ART UNIT	PAPER NUMBER	2143		MAIL DATE	DELIVERY MODE	11/28/2007	PAPER
EXAMINER																
BOUTAH, ALINA A																
ART UNIT	PAPER NUMBER															
2143																
MAIL DATE	DELIVERY MODE															
11/28/2007	PAPER															

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/036,566

Applicant(s)

HORVITZ ET AL.

Examiner

Alina N. Boutah

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37- 38, 41, 42, 46-47 and 69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 38, 41, 42, 46, 47 and 69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

In view of the Appeal Brief filed on August 2, 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37- 38, 41, 42, 46-47 and 69 are pending in the present application.

### ***Information Disclosure Statement***

The information disclosure statement filed July 6, 2006 has been placed in the application file and considered.

It should be noted however, that the applicant has submitted an exorbitant amount of prior art on numerous PTO-1449's which, on initial consideration, do not all appear to have relevancy or pertinence to the instant invention as claimed. The applicant is requested in response to this office action to point out which of these numerous prior art are pertinent or relevant to the patentability of the invention as claimed in this instant application. It should be

Art Unit: 2143

noted that it would be advantageous to the applicant to provide a concise explanation of why each of the prior art is being submitted and how it is understood to be relevant. "Concise explanations are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability." (See MPEP 609 under subheading "A. CONTENT"; and also 37 CFR 1.98(b)(5)).

### *Specification*

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0156879 submitted by Delany et al. (hereinafter referred to as Delany) in view of US 2003/0139970 by Badura et al. (hereinafter referred to as Badura) in further view of USPN 6,671,695 in issued to McFadden.

Regarding claim 1, Delany teaches a computer-based system that facilitates optimizing utility of a communication, the system comprising:

a communication group manager that manages a group of communicating parties to facilitate optimizing the utility of the communication along a communication channel identified by the identifier [figures 3, 5, 8-10, 26, abstract]; and

a group wise communication coordinator that coordinates communication between a subset of the managed group of communicating parties to facilitate maximizing the utility of the communication [figures 3, 5, 8-10, abstract].

However, although Delany discloses communication along a communication channel [0360], he fails to explicitly teach an identifier that identifies one or more communication channels that facilitates maximizing the utility of the communication, the utility of the communication based on a cost and benefit of the communication to a contactor and a contactee, the cost and benefit of the communication is related to one or more preferences of the contactor and the contactee. Badura teaches identifying one or more communication channels (different communication formats such as email, telephone, fax, etc. – see i.e. 0005) that facilitates maximizing the utility of the communication, the utility of the communication based on a cost and benefit of the communication to a contactor and a contactee, the cost and benefit of the communication is related to one or more preferences of the contactor and the contactee (abstract; figure 1 – web base system; 0007, 0008; 0016, 0027). At the time the invention was made, one of ordinary skill in the art would have been motivated to identify a communication channel that facilitates maximizing the utility of the communication based on cost and benefit in order to

Art Unit: 2143

show that the communication arrangement is justified (Badura: abstract), thus maximizing the throughput of the system.

Delany also fails to explicitly disclose the membership of the group communicating parties being based at least in part on a reciprocated communication history between entities that comprise the group. McFadden teaches this limitation in col. 1, lines 24-46, col. 2, lines 15-23 and col. 5, lines 11-25. At the time the invention was made, one of ordinary skill in the art would have been motivated to incorporate the teaching of McFadden into the teachings of Delany in order to set criteria for identifying an individual member in the group.

Regarding claim 18, Delany teaches the system of claim 1, where the communication occurs between one or more contactors and one or more contactees and where the identifier comprises:

- a processor [0016];

- a preference resolver that analyzes a contactee preference data and a contactor preference data and produces a resolved preference data [0109];

- a context analyzer that analyzes a contactee context data and a contactor context data and produces an analyzed context data [table 3]; and

- a communication establisher that establishes a communication between the contactor and the contactee based, at least in part on the resolved preference data that analyzed context data communicating party selection data and the communication channel data [360].

However, Delany fails to explicitly teach a channel analyzer that analyzes one or more communication channels between a contactor and a contactee and produces a communication

Art Unit: 2143

channel data. Badura teaches a channel analyzer that analyzes one or more communication channels between a contactor and a contactee and produces a communication channel data (abstract; figure 1 – web base system; 0007, 0008; 0016, 0027). At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a channel analyzer in order to show that the communication arrangement is justified (Badura: abstract), thus maximizing the throughput of the system.

Regarding claim 19, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communication parties are concurrently engaged in a related activity, or are likely to become concurrently engaged in a related activity [112].

Regarding claim 21, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communicating parties are concurrently processing one or more related documents, or are likely to concurrently process one or more related documents [112].

Regarding claim 23, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communicating parties are concurrently processing one or more related documents, or are likely to concurrently process one or more related documents [112].

Regarding claim 25, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communication parties are concurrently viewing one or

Art Unit: 2143

more related documents, or are likely to concurrently view one or more related documents (figure 12).

Regarding claim 27, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communicating parties are concurrently engaged in a shared project, or are likely to become concurrently engaged in a shared project [211].

Regarding claim 29, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communicating parties are scheduled to communicate within a predefined period of time, or have communicated within a pre-determined period of time [308].

Regarding claim 31, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether two or more communicating parties are scheduled to meet within a pre-defined period of time, or have met within a pre-defined period of time [308].

Regarding claim 33, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether a communicating party has engaged in one or more pre-defined activities of interest within a pre-defined period of time, or is likely to engage in one or more pre-defined activities of interest within a pre-defined period of time [114].



Regarding claim 35, Delany teaches the system of claim 1, the utility optimization based at least in part upon whether a communicating party has purchased one or more pre-defined of interest, or has registered an interest in one or more pre-defined items of interest [114].

Regarding claim 37, Delany teaches the system of claim 1, the utility optimization based at least in part upon the degree to which a communicating party is trusted by one or more other communicating parties [485].

Regarding claim 38, although Delany fails to disclose the computation of an expected utility for the communication using the claimed formula, Applicant has admitted that this was an example of a Bayesian network probabilistic model (see specification page 8, line 25 to page 9, line 19), therefore this feature is known in the art.

Regarding claim 41, Delany teaches the system of claim 39, where a utility function employed to compute the utility of the communication is a combination of functions that separately consider at least one of the ` and the benefit f the communication to at least one of the contactor and contactee [403].

Regarding claim 42, Delany teaches the system fo claim 39, where a utility function employed to compute the utility of the communication is a multi-linear combination of one or more weighted terms associated with at least one of the contactor and contactee (figure 26).

Regarding claim 46, Delany teaches the system of claim 1 where the group wise communication coordinator comprises: a group wise communication assembler that assembles the group communicating parties, and a group wise communication scheduler that schedules a time for the group communication that maximizes the utility of the communication [figures 3, 5, 8-10, abstract].

Regarding claim 47, Delany teaches the system of claim 46, where the group wise communication assembler identifies one or more group member classification required for the group communication; identifies a minimal number of communicating parties from each of the one or more group member classification required for the group communication, and verifies that at least the minimal number of communicating parties from each of the one or more group member classifications are available for the group communication [abstract, 0011, 0016, 0039].

Claim 69 has similar limitation as claim 1, therefore is rejected under the same rationale.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

It is noted that the column, line, and/or page number citations used in the prior art references as applied by the Examiner to the claimed invention are for the convenience of the

Applicant to represent the relevant teachings of the prior art. The prior art references may contain further teachings and/or suggestions that may further distinguish the citations applied to the claims, therefore, the Applicant should consider the entirety of these prior art references during the process of responding to this Office Action. It is further noted that any alternative and non-preferred embodiments as taught and/or suggested within the prior art references also constitute prior art and the prior art references may be relied upon for all the teachings would have reasonably suggested to one of ordinary skill in the art. See MPEP 2123.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N. Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

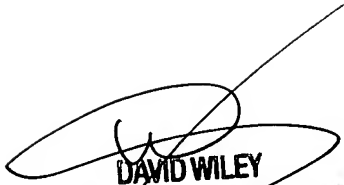
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/036,566

Page 11

Art Unit: 2143

*ANB*  
ANB

  
**DAVID WILEY**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**